

## Chapter 8 Epilogue

# Following the Shutdown of the Work Settling the New Course for Pontoon Fabrication

After the announcement that work on the graving dock in Port Angeles would be abandoned, WSDOT faced two difficult and immediate issues for the construction program. The first was where a new site could be located to build the pontoons and anchors. The second was how to contract for their construction in new arrangements that would be different from the original contractual understanding with Kiewit-General.

These questions were actually resolved in reverse order, because the views of the responsible contractor obviously should be considered on the first question but the identity of that contractor could not be known with certainty until the second question was answered.

To help evaluate new contracting options for the fabrication of new pontoons, WSDOT convened from around the country a panel of experts in construction management, construction and contract administration. The six members of the panel and their credentials are described in the sidebar. Three options were presented as potential solutions to the contracting conundrum.

- Retain the current contractor while leaving WSDOT responsible for providing a new graving dock site (Change order with existing contractor);
- Engage a new contractor and find for the contractor a new potential graving dock construction site. (New contractor).
- Engage a new contractor and make it the contractor's responsibility to locate a graving dock site. (New contractor).

The panel in its formal report reviewed background information on the project and met with WSDOT managers, project executives and engineers on January 25-26, 2005 for detailed briefings and discussion.

The panel reached several important preliminary conclusions reflecting on the overall course of the program, including the attempt to achieve the Port Angeles program:

"There is a clear sense of urgency surrounding the replacement of the existing east span of the Hood Canal Bridge. . . [T]he Washington Department of Transportation is wise in moving ahead with a deliberateness and speed vital in these circumstances.

The contracting approach, replacement strategy and construction means and methods for the existing contract are sound and appropriate for this kind of work and the objectives of the agency in replacing this aging structure.



*Constructing pontoons at the Graving Dock in Tacoma in April 2006*

*The members of the Expert Review Panel were the following:*

**Tom Warne – Tom Warne and Associates, South Jordan, UT**

Prior to founding Tom Warne and Associates, LLC, Tom was the Executive Director of the Utah Department of Transportation. He was appointed to that position in 1995 by Governor Michael O. Leavitt. During his tenure, Tom led the department through the construction of the \$1.59 billion I-15 Reconstruction Project. Hailed as the largest single public transportation contract in the history of the interstate system it is the benchmark for design-build projects both nationally and internationally. This project was originally slated to be built in 10 years. Using the private sector proven method of design-build UDOT delivered the I-15 project ahead of its revised 4½ year schedule and under budget.

**E. Robert Ferguson – E. Robert Ferguson International Infrastructure Consultant, Palm Desert, CA**

A nationally and internationally recognized construction professional with more than 45 years professional experience in the construction industry working.

**Myint Lwin – Director, Federal Highway Administration, Office of Bridge Technology, Washington, DC.**

His roles and responsibilities are to:

- Provide national guidance in the design and construction of major and unusual bridges and tunnels.
- Develop national bridge program and engineering policies. Initiate system and process improvements to continually improve the quality and safety of bridges and structures.

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- Provide technical and program direction for the Highway Bridge Replacement and Rehabilitation Program.

Prior to working at FHWA in Washington, DC, Myint was the Structural Design Engineer at the FHWA Resource Center in San Francisco. He has also worked for the Washington State Department of Transportation and served as Consultant to the Pacific Division of the Department of the Navy at Pearl Harbor.

**Steven Routon – Senior Vice President/Chairman HNTB Construction Services**

Mr. Routon, with 35 years experience in both design and construction management, currently serves as chairman of HNTB's National Construction Services Group. He serves on the board of directors of the Construction Management Association of America, working with both owners and practitioners to improve construction project outcomes.

**Eric Keen – President, HDR Construction Control Corporation**

Mr. Keen oversees the HDR transportation design-build program, program management and construction engineering services on all types of projects for technical competence, project scheduling and budgeting, and committing resources as project demands.

**Tom Sherman – Retired, Gig Harbor**

Marine construction expert and former General Construction owner. He has worked on all five Washington floating bridges. Most recently supervised caisson construction for Tacoma Narrows Constructors, the Kiewit-Bechtel joint partnership building the New Tacoma Narrows Bridge.

The selection of Port Angeles appears to have been done with forethought and represented what, at the time, was a very good and logical choice for the Graving Dock and constructing the pontoons and anchors.

WSDOT's decision to suspend work at the Port Angeles site for the project's Graving Dock is the right thing to do from a contracting and public policy standpoint. It would be impractical and untenable to attempt to salvage it as a site given the significance of the archaeological investigation since its first discovery by limiting the construction work in and adjacent to the site.

The sense of urgency and the imperatives that drew WSDOT to pursue the Hood Canal Bridge East-Span Replacement Project continue to be present and demand immediate action on the part of the agency.

The project surpasses nearly all other large projects in the country in terms of the complexities of building a very difficult bridge structure while still exercising proper stewardship for the environment. The formal environmental requirements including the various permits and their respective conditions further complicate the construction efforts. Taken individually and in aggregate these requirements add an additional degree of difficulty to the project as a whole."

By the time of the panel's deliberations, WSDOT had already solicited statements of interest regarding potential sites at which the pontoons could be fabricated. Eighteen potential sites had been submitted. The panel commented upon the preliminary work in this arena that had been conducted to date.

It is our judgment that WSDOT is exercising appropriate due diligence in this effort and has adopted a sound criteria by which to judge the sites for suitability for this project.

The panel then listed and weighed the pros and cons of the three options for structuring the contractual arrangements for the new course of pontoon fabrication. The panel recommended that the first course be followed – engaging the existing contractor through a change order to carry on its responsibilities for fabricating the pontoons and anchors at a new site WSDOT would locate.

The panel recognizes that Option 1 offers the surest route to having the project completed in the shortest amount of time and with the greatest certainty in price. WSDOT, elected officials and the community must realize that with the current situation of the project, the impacts from the delays at Port Angeles and the changes to the future work will invariably result in a final contract amount higher than the original bid regardless of the option chosen.

The Panel also recommended that WSDOT move ahead as promptly as possible to select a new graving dock site.<sup>1</sup>

### ***Selection of the Pontoon Construction Site***

The process for identifying potential new sites for the pontoon fabrication actually had started by the time the Expert Review Panel convened. On December 22, 2004, WSDOT solicited interest from owners of commercial waterfront property available for use or purchase in the Puget Sound area. Eighteen proposals were received regarding sites in nine counties (including a site in Grays Harbor). WSDOT reviewed the proposals and their supporting techni-

<sup>1</sup> The Panel's analysis and conclusions are contained in a letter from its Chairman Tom Warne to Secretary MacDonald dated February 3, 2005.

cal data. Three sites were short-listed in the course of the review. Eventually the best site was judged to be the Concrete Tech yard and existing graving dock in Tacoma. The casting work was contemplated to be performed at that location while the finish, or fit-out work would be performed at the Todd Shipyard in Seattle.

Representatives of WSDOT Concrete Tech and the contractor then proceeded to obtain permits for work at the site. The permitting obstacles seemed less onerous than what had earlier been predicted by the regulatory agencies when their original objections to the Concrete Tech site had been registered in the Interdisciplinary Team (see Chapter 2).

The selection of the pontoon construction location was subject to the need for a satisfactory change order negotiation with the contractor to cover the work. Negotiations with the contractor to reach the price for the work were accomplished in November 2005 and the contractor began work refurbishing and preparing the graving dock at Concrete Tech for the pontoon fabrication. In a significant milestone toward the delivery of the project, the first concrete pour on the new pontoons was performed at Concrete Tech on April 28, 2006.

Meanwhile, a separate discussion considered whether the smaller portion of the work originally intended for the Port Angeles graving dock – the fabrication of the 20 large concrete anchors that would position the new pontoons – could be continued at an alternative site in the vicinity of the graving dock site.<sup>2</sup> Letters solicited by WSDOT from local and federal officials, as well as the Lower Elwha Klallam Tribe, highlighted some of the barriers that would be presented, especially in securing necessary compliance with environmental review requirements as well as further potential Section 106 consultation given the now-demonstrated richness of the area in archaeology and cultural archeological and cultural significance. FHWA and the Federal Advisory Council on Historic Preservation both indicated that extensive and time-consuming reviews would have to be conducted, even if the Tribe concurred in an anchor fabrication plan. In this setting, progress toward agreement on an anchor fabrication approach could not be achieved after months of discussion and review. On April 28, 2006, WSDOT announced that the need to proceed with anchor fabrication in order that the anchors would be ready when needed for the new pontoons had led WSDOT to another site for the anchor construction. The new location was the Todd Shipyard in Seattle.

### **Unsuccessful Attempts at Resolution of Consequential Site Issues**

Shortly after the decision to abandon construction at the Port Angeles site, efforts also turned to a number of difficult issues presented by the outcome of events. Attention shifted to these issues at a time when feelings both pro and con on the abandonment decision ran high, fueled by frustration at events and disparate expectations about how matters might otherwise have been resolved. WSDOT officials appeared both in public meetings and in private conferences in Port Angeles to discuss the reasons that the decision had been made.<sup>3</sup> Local officials urged that the decision be reversed and the construction resumed — a position that was urged throughout the month of January but ultimately was not agreed to.<sup>4</sup> Meetings were held in Olympia as well as in Port Angeles, including a large meeting at the offices of the Department of Transportation on February 2, 2005, where tribal members, state

<sup>2</sup> “Part of graving yard to reopen?” *Peninsula Daily News*, 19 April 2005; “Guarded views on anchor plan,” April 20, 2005; “Last glimmer for graving yard vanishes”, *Peninsula Daily News*, 9-10 December 2005.

<sup>3</sup> “Tribe, State set graving talks today,” *Peninsula Daily News*, 4 January 2005.

<sup>4</sup> “P.A. officials view Native burial boxes up close,” *Peninsula Daily News*, 10 January 2005.; “PA chamber seeks graving yard order,” *Peninsula Daily News*, 20 January 2005.; “Graving site fate affirmed,” *Peninsula Daily News*, 20 January 2005; “Elwha reject event aid,” *Peninsula Daily News*, 23 January 2005; “Elwha lament racism in PA,” *Peninsula Daily News*, 26 January 2005 “Chamber leader apologizes for comments on tribe,” *Peninsula Daily News*, 26 January 2005. “Mayors send fiery criticism of state over close-down,” *Peninsula Daily News*, 28-29 January 2005; “Governor will nix reopening graving yard,” *Peninsula Daily News*, 30 January 2005; “Tribe rejects suggestion it won’t respect contracts,” *Peninsula Daily News*, 31 January 2005; “Graving yard’s fate affirmed”, *Peninsula Daily News*, 25 February 2005.; “Final graving yard bid fails to sway tribe,” *Peninsula Daily News*, 29 March 2005; “Tribe nixes land swap for village,” *Peninsula Daily News*, 6 April 2005; “Buck explains details behind secret meeting,” *Peninsula Daily News*, 12 April 2005.

On March 22, 2005, Representative Jim Buck submitted 20 questions to the Office of the Attorney General (AGO) requesting a legal opinion on a wide range of issues related to the Graving Dock project. In Rep. Buck’s letter he expressed that it was “...imperative that we as Legislators fully understand the legal situation we are currently operating in and what legal options we have in making future decisions.” In a reply dated July 5, 2005, James Pharris of the AGO issued an informal opinion responding to 13 of Representative Buck’s questions.

legislators, and local officials traded position statements on the unwinding of the graving dock program.<sup>5</sup> Controversy continued to simmer.<sup>6</sup>

Meanwhile, the contractor at WSDOT's direction removed construction equipment and secured the site with fencing in order to protect the entire area and, in particular, to assure that the archaeological site would not sustain further disruption from activity of any kind. A very limited amount of additional archaeological work was performed in order to complete tasks actually in progress. Quickly the site where trades workers, archaeologists, assistants and observers had swarmed throughout most of 2004, became still.

Cultural observances continued to be made by the Tribe. For example, the Tribe requested WSDOT's support and assistance in conducting a healing ceremony at the site, on Saturday, January 15, 2005. Several hundred people, including Native Americans from around the state and in neighboring Canada, along with many of the non-Native participants in the long graving dock saga, attended an almost day-long event.<sup>7</sup>

With community meetings and other forums for discussion of the controversy,<sup>8</sup> all were integrated into another round of consultation activities with the purpose of resolving some of the many issues left in the aftermath of the cessation of the work. These consultation sessions were structured in the form of an attempted mediation facilitated by Tim Thompson, a consultant from Tacoma, Washington, with considerable past experience in tribal consultation.

The mediation sessions were participated in, following the earlier experience, by the business council of the Tribe together with its advisers, by WSDOT and its counsel from the Office of the Attorney General, by Allyson Brooks and others from the Department of Archaeology and Historic Preservation and by various federal officials and others.

Mindful that the discoveries made at the graving dock site presented large issues for what might be an extensive portion of the Port Angeles waterfront area, the mediation sought first to deal with a list of "short term" issues in the hopes of resolving matters of most pressing concern.

These issues included the Tribe's interest in either gaining ownership of the site or the support of key officials for the eventual acquisition of ownership by the Tribe should legislation be required. The Tribe also desired that evidences of the site's disturbance, particularly the uncompleted steel sheet pile wall around the graving dock, be removed. The parties also discussed differing options for investigation, treatment and possible return to the site of material removed from the site to the Shotwell recycling in the very earliest days of the project.

Uppermost in everyone's mind was the respectful reburial of the cedar boxes of ancestral remains that the workers had removed from the site and carefully stored and protected toward the day when they could be returned to rest. In the agreements made in March 2004 before construction had resumed at the site, provision had been made to assist the Tribe in locating an appropriate burial location. In the aftermath of the project's cancellation, the Tribe's representatives strongly felt that the reburial should be located near or at the graving dock site. Several plans were proposed and discussed, as WSDOT, the Department of Archaeology and Historic Preservation and other parties sought to respect and reach agreement on this request. Despite the acceptance of this re-burial intention, agreement on overall terms of the

<sup>5</sup> "Leaders will mull fate of graving yard," *Peninsula Daily News*, 2 February 2005; "Graving talks 'blunt,'" *Peninsula Daily News*, 3 February 2005; "State lawmakers discuss graving yard," *Peninsula Daily News*, 4 February 2005.

<sup>6</sup> Mayor raps tribe over trust," *Peninsula Daily News*, 9 March 2005.

<sup>7</sup> "300 brave cold for PA 'healing,'" *Peninsula Daily News*, 16 January 2005

<sup>8</sup> Another community meeting, for example, attended by several hundred people in Port Angeles as well as by three members of the Transportation Commission (Chairman Dan O'Neal, Members Ed Barnes and Elmira Fornier) and Secretary MacDonald, was held at Governor Gregoire's suggestion on February 14, 2005. "Graving Session outlined," *Peninsula Daily News*, 10 February 2004; "Monday's graving yard session no sweetheart deal," *Peninsula Daily News*, 11 February 2005; "Tribes support Elwha," *Peninsula Daily News*, 14 February 2005; "Sides vent over graving yard," *Peninsula Daily News*, 15 February 2005.

“short” list, (in contrast with the larger questions of waterfront development as affected by the discoveries that would ultimately be discussed in a broader forum) could not be achieved.

The facilitated mediation or negotiation continued for some months but ultimately was abandoned after lawyers for the Tribe filed a lawsuit including a class action in state superior court on August 12, 2005. The lawsuit was brought against the state, individual state officials, contractors, the two archaeology firms, and others.

The principal contentions offered in the lawsuit were that WSDOT and its contractors knowingly desecrated the historical site and tribal graves in violation of state native graves protection laws, WSDOT breached some of its obligations under the Sec. 106 Memorandum of Agreement and Site Treatment Plan, and that the site should receive the protections of the state historical cemetery laws. The Tribe also contended that the contract archaeologists were negligent in the assessment, evaluation, and excavation of the site. Among other things, the Tribe asked the court to award monetary damages and reburial of the human remains on the graving yard site.

In an answer and counterclaim, the state defendants generally denied liability and asserted that the state lawsuit was premature while the federal Section 106 consultation process still continued. It also asserted that the Tribe’s claims were barred by the Settlement Agreement and Release entered into in March 2004, when the graving dock program was agreed to following the second site assessment. Additionally, the State pointed out that the Tribe and its leaders shared some responsibility for the failure to identify the historical site before the project began and for their involvement in the post-discovery site assessment and excavation process.

Proceedings in these contending suits are, as of May 1, 2006, stayed under an order of court pending the outcome of further attempts to mediate the dispute involving a larger array of parties and facilitated by John Bickerman, an attorney from Washington, D.C.<sup>9</sup>

<sup>9</sup> “State, Lower Elwha agree to negotiations over graving yard site,” *Peninsula Daily News*, 23 December 2005. Tribe, state set Tse-whit-zen talks, *Peninsula Daily News*, 24 December 2005. “Talks prospect brings hope to PA impasse,” *Peninsula Daily News*, 25 December 2005.



## Appendix A

### A Summary of Costs to the Hood Canal Bridge Project from the Abandonment of the Graving Dock Project in Port Angeles

#### Schedule of Graving Dock Expenditures July 2005

Cost Type	Schedule of Expenditures
<b>Site Acquisition</b>	<b>\$5,049,931</b>
<b>Construction</b>	
Construction	\$46,292,802
Mobilization	\$13,267,705
<b>Total</b>	<b>\$59,560,508 <sup>a</sup></b>
<b>Design (PE)</b>	<b>\$2,488,024</b>
<b>Construction Engineering (CE)</b>	<b>\$3,984,867 <sup>b</sup></b>
<b>Mitigation Payment to Tribe</b>	<b>\$3,437,000</b>
<b>Consultants – for Construction <sup>b</sup></b>	
Archaeological Services (Larson Archaeological Services and Western Shores Historical)	\$5,671,421
Other	\$725,399
<b>Total</b>	<b>\$6,396,820</b>
<b>Additional Costs Not Covered – State Forces</b>	<b>\$446,522</b>
<b>Additional Costs Not Covered – Service Agreements</b>	
Sheet Piles	\$4,263,209
Anchor Cables (East Half replacement)	\$730,271
Graving Dock Archeology Liability Insurance (OFM/RMD)	\$447,378
<b>Actual Expenditures</b>	<b>\$86,822,757</b>

<sup>a</sup> We anticipate this amount to change after an independent audit of the contractor's financial records, and final settlement with some suppliers. While we don't expect this portion of construction costs to change dramatically, it is important to await completion of the audit to determine actual costs to WSDOT.

<sup>b</sup> We anticipate this amount may change as issues related to the Port Angeles site are resolved and litigation with the Lower Elwha Klallam Tribe is settled.





## *Appendix B*

### **List of Documents Referenced in the Report**

#### *Chapter 1*

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### *Chapter 3*

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## *Glossary*

### ***Abbreviations and Acronyms***

<b>CEVP</b>	Cost Estimating Validation Process
<b>EPA</b>	Environmental Protection Agency
<b>ESA</b>	Endangered Species Act
<b>DAHP</b>	Department of Archaeology and Historic Preservation
<b>FHWA</b>	Federal Highway Administration
<b>FONSI</b>	Finding of No Significant Interest
<b>NAGPRA</b>	Native American Graves Protection and Repatriation Act
<b>NEPA</b>	National Environmental Policy Act
<b>NHPA</b>	National Historic Preservation Act
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>NRHP</b>	National Register of Historic Places
<b>OAHP</b>	Office of Archaeology and Historic Preservation
<b>SEPA</b>	State Environmental Policy Act
<b>SHPO</b>	State Historic Preservation Office
<b>TPEAC</b>	Transportation Permit Efficiency and Accountability Committee

## **Words to Know**

### **Approach span**

*Portion of the bridge founded on land. The approach spans will be replaced during the bridge project.*

### **Crossbeam**

*A horizontal or transverse beam. The Hood Canal Bridge crossbeams are structural beams resting on two supports. Girders are set upon the crossbeams. The bridge deck is then built upon the girders.*

### **Draw span**

*A retractable section of the Hood Canal Bridge that opens for marine traffic. The Hood Canal Bridge is required by US Coast Guard to serve marine traffic. A common user of the bridge's draw span is the US Navy from nearby Subbase Bangor.*

### **Graving Dock**

*The term "graving" means the act of cleaning a ship's bottom. A "graving dock" is a large dock from which water can be pumped out; used for building ships or for repairing a ship below its waterline.*

### **Pontoon**

*A floating structure, such as a flat bottom boat, that is used to support a bridge. In the case of Washington's floating bridges, the pontoons are large concrete structures. The Hood Canal Bridge's east-half uses 17 pontoons. Crews will build 14 new pontoons at the Port Angeles graving dock and rehabilitate three pontoons used in the 1982 west-half replacement project.*

### **Section 106**

*The federal National Historic Preservation Act, Section 106, defines the process by which local, state and federal agencies identify and preserve national historic sites. The section also defines the role of state historic preservation officers. The section outlines how an agency "consults" with Native American tribes to determine proper mitigation plans, in most cases resulting in a memorandum of agreement between the involved government agencies. Detailed Section 106 information is available on-line at <http://www.achp.gov/>.*

### **Sheet pile**

*Long, thin metal sheets that interconnect. The sheets are driven into the ground using a vibrating hammer. The interlocked sheets will make up the outer wall of the graving dock.*

### **Shell midden**

*Layers of shell, burned rock, fish bone, deer bone, and other food refuse. The layers accumulate on the beach surface over many centuries of occupation by the native people, in this case the Lower Elwha Klallam Tribe.*

### **Superstructure**

*The portion of the Hood Canal Bridge that is built above the crossbeams. The superstructure includes the girders and bridge deck.*

### **Transition span**

*The steel span that connects the bridge founded on land with the portion founded on water. The transition spans literally transition the roadway from land onto the floating section. The transition spans at both bridge ends will be replaced with wider sections during the bridge project.*

### **Trestle**

*A movable frame or support similar to scaffolding. A trestle is a kind of framework of strong posts or piles, and crossbeams, for supporting a bridge. The Hood Canal Bridge project will build a temporary trestle at the east end upon which a new approach span will be constructed. Possibly in 2005, the contractor will remove the existing east end approach span and roll a new transition span into its place.*